## Re-identification of a booby *Sula* sp. at Lagos, Nigeria, in July 1970

D. I. M. Wallace

**Réidentification d'un fou Sula sp. à Lagos, Nigeria, en juillet 1970.** Grâce à des références photographiques récentes, un jeune fou *Sula* sp. observé à Lagos, Nigeria, le 11 et 12 juillet 1970 est réidentifié comme un Fou à pieds rouges *S. sula* juvénile. Ceci devient la première mention de l'espèce pour l'Atlantique de l'Est et l'Afrique de l'Ouest au nord de l'équateur. Il s'avère qu'un dessous de l'aile entièrement sombre, récemment présenté comme typique du Fou à pieds rouges immature, n'est pas un caractère sûr.

Four decades ago, seabird identification was a much more difficult exercise due to the lack of detailed literature. So, when at 08.30 hrs on 11 July 1970, I found a small immature booby *Sula* sp. fishing with Black Terns *Chlidonias niger* at Lagos harbour mouth, Nigeria, I was flummoxed. All I knew for sure was that it was not a young Northern Gannet *S. bassana*. Referring to Bannerman (1953), I deduced that the only likely small *Sula* was Brown Booby *S. leucogaster*. As my bird appeared to fit an immature of that species by showing 'a faint indication of adult plumage pattern', I published it as *S. leucogaster* (Wallace 1973).

About 1992, in correspondence with the authors revising the BOU Nigeria Checklist, I pointed out that I had not eliminated a brownmorph Red-footed Booby S. sula. Regrettably Elgood et al. (1994) sustained my bird as S. leucogaster. By 2005, three bouts of seawatching in Oman had brought me many Masked Boobies S. dactylatra and at last one certain S. leucogaster. Neither species recalled the Lagos booby. On 30 June 2011, I refound my seven drawings (Fig. 1) and was able to compare them with the Sulidae illustrations in Beaman & Madge (1998). It was the figure of a juvenile S. sula that let the penny of my Lagos booby begin to drop, and finally came the telling photographs of *sula* in Crossley (2011). These included a warm brown juvenile showing soft striations on its back and pale vanes on its inner primaries, which virtually matched my longdebated booby. The following description comes from my field sketches and a brief account sent to the Nigerian Ornithological Society in 1970:

'A small *Sula* feeding in the always fish-rich interface of ocean and lagoon, watched from the east mole of the harbour mouth through  $9 \times 35$ 

binoculars at 50–300 yards in dull sunlight for 30 minutes (and intermittently up to c.12.00 hrs on the next day).

Very agile in flight, able to lift off immediately from water surface and fishing by shallow dives on half-folded wings after slow search glides with wings held forward like Cory's Shearwater *Calonectris diomedea*; even able to 'stall' with feet down and held out. When settled, sat high with head held up and tail well clear of water. Structure typical of family but tail just wedge-shaped, lacking central point.

Head, neck, upper chest, shoulders and most upper wing coverts dusky-brown; back, rump, upper-tail coverts and greater coverts slightly paler, warmer buff-brown, with pale shade over last tract most obvious next to scapulars; flight feathers dusky-brown becoming dull black on primaries and showing pale vanes on at least five innermost quills; lower chest, underbody and obvious underwing panel from wingpit to inner hand not sharply demarcated but paler than head and upper parts, all pale buff except for browner fore upper flanks. Pale wing lining looked narrower when wings angled for dive. Tail dusky-brown. No sign of pale speckling but slightly darker soft striations showed on paler tracts, particularly between wings and over underbody. Bill just paler than head; eye not obvious; legs and feet paler than dark undertail, buffish-grey.'

To claim the bird as a certain Red-footed, I must explain its dull, patently not red feet. In Harrison (1983) and Enticott & Tipling (1997), those of juveniles are described respectively as 'yellowish-grey' and 'greyish-pink', but in Beaman & Madge (1998), they were noted as 'blackish ... soon becoming reddish'. In a well-lit photograph of two perched juveniles, their legs and feet are



**Figure 1.** Original drawings of the immature booby *Sula* sp. observed at Lagos harbour mouth, Nigeria, 11 July 1970 (D. I. M. Wallace)

Dessins originaux du fou *Sula* sp. immature observé à l'embouchure du port de Lagos, Nigeria, 11 juillet 1970 (D. I. M. Wallace)

chalky flesh (Enticott & Tipling, 1997: pl.115[9]) and in three November juveniles, they are fully flesh tinged pink (Carr 2011). Clearly, the initial colour of legs and feet in Red-footed Booby varies but is never the bright red of adults in all morphs.

The recent synthesis of characters in van Duivendijk (2010) mentions that a 'completely dark underwing' is characteristic of immature sula. However, Harrison (1983) states that the underwing pattern is 'though variable between white and brown morphs unlike any other booby' and both of his illustrations of the underwings of brown morphs are essentially brown vaguely lined grey or blackish, and show pale quill vanes. Harrison (1983) also stresses that all sula fledge as brown morphs. In Enticott & Tipling (1997) the underwing of such juveniles is described as 'dark with paler greater coverts', progressing to 'patchy with no definite pattern'. Their Pl. 115(5) of a brown-morph adult from the Galápagos fully illustrates the entire underwing: the tips of the greater coverts, all the median and lesser coverts, the primary-coverts and the inner webs of the



Figure 2. Retrospective painting of juvenile Red-footed Booby *Sula sula* with Black Terns *Chlidonias niger*, feeding on small fish in Lagos harbour mouth, Nigeria, 11 and 12 July 1970 (D. I. M. Wallace)

Peinture rétrospective d'un Fou à pieds rouges *Sula sula* juvénile avec des Guifettes noires *Chlidonias niger*, se nourrissant de petits poissons à l'embouchure du port de Lagos, Nigeria, 11 et 12 juillet 1970 (D. I. M. Wallace)

Re-identification of a booby Sula sp. at Lagos, Nigeria: Wallace

primaries are pale brown to buff and across most of the 'arm' concolourous with the underparts, thereby producing an even more extensively pale wing-lining than I observed on the Lagos bird. As for other immatures, photographs of partially white birds (from two oceans) show rows of quite conspicuous pale tips to the median coverts and hints of other pale marks on the outer primarycoverts and primary bases. They clearly lack the marked pale off-white panels of immature *leucogaster* and *dactylatra*, but are not 'completely dark'.

The remarkably variable morphology of *S. sula* has had a scant press since Murphy (1936), but it seems clear that not all dark-morph juvenile *sula* are buff-brown. At least three photographs (referred to above and from three oceans) show birds that are ash-grey with a pinkish-buff wash and all lack even slight striations.

My belated claim for the Lagos bird to be treated as the first record of S. sula in the East Atlantic and West Africa north of the equator rests on five well-established characters: its small size, nimble flight and feeding behaviour, generally uniform appearance (in dark morphs) and dull feet, the last compatible with a juvenile. Its appearance coincided with an arrival of 50 Damara Terns Sterna balaenarum from southern Africa but its origin is debatable. The nearest breeding populations of S. sula to Lagos lie south of the equator on Ascension and the Brazilian island of Fernando de Noronha, and these are considered to be the likely source of at least three recent records from the coast of Namibia (P. Ryan in litt. 2012). It follows that an adult white-tailed brown morph at a colony of S. leucogaster in the Cape Verde archipelago in August 1986 (Snow & Perrins 1998) becomes only the second in the East Atlantic north of the equator.

## Acknowledgements

I am grateful to the African Bird Club for treating my 41-year-old re-identification with respect and thank Guy Kirwan, Ron Demey and Peter Ryan for their improvements of the content and text.

## References

- Bannerman, D. A. 1953. The Birds of West and Equatorial Africa. Vol. 1. Edinburgh & London, UK: Oliver & Boyd.
- Beaman, M. & Madge, S. 1998. The Handbook of Bird Identification for Europe and the Western Palearctic. London, UK: Christopher Helm.
- Carr, P. 2011. The British Indian Ocean Territory. *Br. Birds* 104: 642–659.
- Crossley, R. 2011. *The Crossley ID Guide: Eastern Birds.* Princeton, NJ: Crossley Books / Princeton University Press.
- van Duivendijk, N. 2010. Advanced Bird ID Guide— The Western Palearctic. London, UK: New Holland.
- Elgood, J. H., Heigham, J. B., Moore, A. M., Nason, A. M., Sharland, R. E. & Skinner, N. J. 1994. *The Birds of Nigeria: An Annotated Check-list.* BOU Check-list No. 4. Second edn. Tring: British Ornithologists' Union.
- Enticott, J. & Tipling, D. 1997. *Photographic Handbook* of the Seabirds of the World. London, UK: New Holland.
- Harrison, P. 1983. Seabirds: an Identification Guide. Beckenham: Croom Helm.
- Murphy, R. C. 1936. Oceanic Birds of South America. Vol. 2. New York: Macmillan & American Museum of Natural History.
- Snow, D. W. & Perrins, C. M. 1998. The Birds of the Western Palearctic Concise Edition. Vol. 1. Oxford: Oxford University Press.
- Wallace, D. I. M. 1973. Seabirds at Lagos and in the Gulf of Guinea. *Ibis* 115: 559–571.

Mount Pleasant Farm, Main Road, Anslow, Burton on Trent, Staffordshire DE14 9QE, UK.

Received 24 May 2012; revision accepted 11 December 2012.